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SURGICAL OPERATIONS IN THE MOUTH, FAUCES, &c.

From Lectures on the Operations of Surgery, recently delivered in University College Hospital, by Robert Liston, Esq.

I now proceed to speak of affections situated at the posterior part of the mouth—of the fauces.

In the first place, you have to treat inflammatory affections of the soft palate and tonsils. These affections are common enough, and many of them do not require more treatment than the patient himself or his friends can conduct. They arise from the exposure of the external surface, or of the mucous membrane, to the influence of cold and moisture. The pain and the swelling will disappear on adopting some means to restore the functions of the skin—warm water, and the exhibition of a diaphoretic.

But now and then these inflammations run so high, as to demand the attention of the surgeon: the swelling becomes greater and greater, deglutition is performed with great effort, and the breathing, perhaps, becomes affected. The latter cannot be seriously interfered with, unless the passage to the nostrils is obstructed as well as that by the mouth. Patients have been suffocated by the inflammatory swelling, whether attended by the formation of matter or not. This has occurred where the tonsils have been affected before, and have swollen to a great extent. By the inflammatory action you frequently find the tonsils enlarged; the whole of the parts are called into such violent action, that there is no passage down the throat, and it has been followed by sudden suffocation. The patient has died in a moment, in the same way as from affection of the rima glottidis—by the entanglement of mucus in the narrowed fissure of the fauces, betwixt the two tonsils.

The swelling is sometimes occasioned by the formation of matter between the folds of the velum, and these abscesses sometimes require active surgical interference. If an abscess is allowed to form to a great extent, and the breathing becomes embarrassed, there is even some risk, by its sudden and spontaneous opening, of the matter getting into the wind-pipe, and causing suffocation.

You will be called upon to remove this collection of matter; and it is, in general, very easily effected. There is no necessity for providing yourselves with this instrument—a pharyngotome, a sort of lancet, in a spring case, with a screw in the handle to regulate the extent of the incision and the length to which the blade can be protruded. An abscess in the

throat may be opened quite well with a common pocket bistoury. By feeling the parts, ascertaining that the swelling is elastic, and perceiving that it is red and turgid, you make up your mind that there is matter there, and that it is necessary to evacuate it. You also consider the duration of the inflammatory action, in determining as to the existence or not of purulent fluid. You depress the tongue with the finger of one hand, and having wrapt lint round the blade of the knife to within three quarters of an inch of the point, you introduce it, with its back towards the tongue. The patient's head must be uncommonly well secured, lest he should make a sudden effort, and the incision should be made either in a wrong place, in a false direction, or too deep. The operation may be performed with perfect safety, if you employ these precautions. The instrument must be directed straight backwards: if you incline it to one side, towards the pterygoid process, and the patient were to make a sudden movement of the head forwards, you might push the instrument among the large vessels, and even wound the internal carotid; cases have occurred where fatal hæmorrhage has been produced. It is advisable to interfere with these cases early, because now and then abscesses of an unhealthy kind destroy the parts; perhaps the abscess at last bursts spontaneously, ulceration proceeds, large vessels may be opened, and the patient have violent and even fatal hæmorrhage from the throat. The matter is generally collected between two folds of the velum palati, and occupies one side.

There are some other operations practised here; they may be of little moment, but still all these operations in deep cavities require some precautions, and are often of more difficult execution than may, by the uninitiated, be supposed.

Sometimes it is advisable to remove portions of the tonsils. When they are in a state of hypertrophy the patient breathes with difficulty; he perhaps is subject to occasional inflammatory attacks, and he runs the risk, in some of these, of being suffocated. Children often labor under this affection; the voice is altered considerably, and it is desirable to have the swelling removed. I do not know that there are any possible means of doing so except by attacking them with a cutting instrument. You find these swellings occurring in people of delicate habit, and in scrofulous children; but they may take place in persons enjoying apparently a very good constitution. The affection of the tonsils may be accompanied by swelling in the lymphatic glands of the neck, and you may try to reduce them by iodine. Attempts are made to promote absorption by the employment of gargles, and touching the surface with dry powdered alum, or nitrate of silver; but these means seldom answer any good purpose. You cannot by the constant application of the nitrate of silver expect to get rid of the swelling, except you produce deep ulceration, and it would be rather a painful business to burn away the tonsils by escharotics, and might be attended with considerable annoyance and risk.

You may be called to the case of a young subject—a child, where the swelling has arisen to such an extent that it threatens suffocation during the night. I have seen such cases over and over again, and, in order

to prevent fatal consequences, it may be necessary to take away one or both tonsils. Where a patient has suffered long under this affection, does not speak with freedom, performs deglutition with difficulty, and every means have been tried in vain, it becomes desirable to get rid of the swelling, and this may be done with facility if you go the right way about it. It is stated in old surgical writings (in "*Cheselden's Anatomy*" there are plates representing the manner in which it is to be performed), that the swelling of the tonsils is to be removed by ligature; and even in the "*Medico-Chirurgical Transactions*" of the present day, there are papers giving an account of the best mode of tying the tonsils. I am not sure that some surgeons do not resort to it even to this day. If ligatures succeed, the patient is subjected to a tedious process, and a very painful one. It is some days before the ligatures come away; there is a discharge of putrid matter from the throat; and, as in the cases of tumors of the mouth attacked by ligature, there is profuse salivation. The parts swell, and the patient is obliged to have a basin under the chin to catch the discharge. This is the instrument of Mr. Chevalier, who published a paper on tying the tonsils. It was intended to transfix the tonsil, and then separate the ligatures, and tie one on one side and one on the other. This was to be turned so as to bring the point through the tonsil from behind forwards. The needle I used to tie the tongue or erectile tumors will answer the purpose if you propose to try this proceeding, but it is one that I do not advise. There is no necessity for tying these tumors, because the swelling is a mere enlargement of the tonsils; there is no necessity for taking the whole of it away; you see the follicles containing sebaceous matter, which smells very offensively; the swelling is by no means vascular, and any wound made in it heals up with great rapidity. There is nothing malignant about the swelling, nothing scirrhus or cancerous, and if the patient is at all steady you may take it away with great ease. You place the patient in a good light, and lay hold of the tonsil by means of this instrument, to which the French writers give the name of "*pince airigne*," meaning forceps with hooks, or "*pince de Museux*," from the inventor. Operating on the right tonsil, you hold the forceps in the right hand, and an assistant holds you a narrow, straight-pointed bistoury, or you hold it in your lips with the handle towards your left hand. You then put down the patient's tongue with the fore-finger of the left hand, and get a view of the tonsil; you carry the knife along the tongue, with its back towards this organ, slip it under the tonsil, and with a sliding motion cut it off, and draw it out with the forceps, taking care not to wound the velum or lips. You repeat the operation on the left side, using the forceps with the left hand, and the bistoury with the right. You do not attempt to extirpate the whole of the tonsil; if you did, you would endanger the vessels. You merely cut off, by a perpendicular section, the prominent part of the tonsil, to give room to the patient to swallow and breathe. In adults this operation is preferable to any other, that is, when you have to deal with sensible people, who will afford every facility.

I have even performed the operation thus in a good many children,

and I have very often found them willing enough to submit to it. They have been often suffering previously from difficult breathing, and, afraid of suffocation, they have come to me with their mouths open, and have borne the operation without wincing. I once saw a little lady under these circumstances, with my friend Dr. N. Arnott, and her only remark after the affair was over, and when she saw a little blood hawked up, was—"Dear mamma, I think they must have hurt me a little." But you sometimes find that they will not open their mouths, and then you will have great difficulty with them. Of course, you will not have recourse to the operation in children unless under urgent circumstances, because it is possible that as they attain maturity, improve in health perhaps, or have it improved by proper treatment, the swelling may subside to some extent. Children are brought now and then by their parents, who have noticed that they do not speak well, and on looking into the throat you find the tonsils swelled; the parents become fidgety about it, and are anxious to have it removed; but you must not always please them in this point. It is not always necessary to perform the operation, and you may find a difficulty in accomplishing your object, even in young people of sixteen or eighteen, who are brought to you on account of an indistinctness of voice, their parents being anxious perhaps that they should sing like their neighbors' young ladies. If you can get them to keep steady and open their mouths, you may take off the part in the way I have described, but where there is difficulty you may employ such an instrument as I now show you. Two or three years ago there were an immense number of instruments of this fashion produced all at once—American and French—for performing this operation. Every writer thought it his business to contrive or to say something about these instruments. There is one depicted in Desault's works, which I think he calls a *kiotome*. This celebrated French surgeon was a contemporary of our John Hunter; he used the instrument, if I am not much mistaken, for various purposes, for opening cysts in the bladder, but he recommends the excision of the tonsils also to be made with it. You must first of all, then, endeavor to get the tonsil within the range of the instrument, and you must have them of different sizes. You will find it advisable to provide yourselves with a hook, or small vassellum, with which to pull the enlarged gland more completely through the opening or fenestra of the instrument than you can do by other means. Having effected this, you push the slipping blade forwards, and cut off the prominent part of the tonsil. I have seen some of these machines provided with a sort of skewer, which is to be thrust forward first, and when the tumor is so transfixed, it is raised up by another contrivance of a hinge. All this is for the use of those gentlemen practising surgery who are deficient in dexterity, and for the benefit of the cutlers. But although this is a very nice-looking instrument, it is not a very useful one, and I would not advise you to burden yourselves with it, though I must have almost every instrument that has been contrived, both old and new. This operation of excision, however managed, is very much preferable to tying the tonsil; it is a proceeding accomplished at once without any great difficulty, in ordinary cases, and

scarcely with any pain to the patient. It is quite effectual; there is no return of the swelling; and under any circumstances it is an exceedingly satisfactory proceeding.

You have sometimes to treat affections of the uvula. It is sometimes enlarged to a great extent; it is so in all inflammations of the throat. It hangs down upon the tongue; it sometimes comes on the rima glottidis, and causes irritation and coughing, but that goes off, along with the swelling of the neighboring parts, by general treatment. By applying some slight astringent gargle the parts resume their natural condition. In cases of that kind you would not have recourse to any active surgical operation.

But the uvula sometimes continues enlarged, and it causes occasionally unpleasant feelings to the patient. It may be swollen, in consequence of repeated attacks of inflammation, and the enlargement of it never entirely disappears. It swells more and more at each attack, and at last hangs down, so as to cause considerable inconvenience. Sometimes the uvula is naturally long. I saw a patient some time ago in whom the uvula coiled up in an extraordinary manner on the tongue. It was so long that you could have easily taken hold of it with the fingers, for it could be blown out almost to the tip of the tongue, and so as to come in contact with the incisors. I have seen the uvula often bifurcated, and sometimes there are one or more warts, of considerable size, on its extremity. Here is a specimen of a very large one, which I removed lately; it is as large, you perceive, as the kernel of a filbert.

You will be called upon to take away this elongated uvula at the request of the patient, but not otherwise. The patient to whom I just now referred, still keeps his enormously elongated uvula; I never said anything to him about removing it. But if a patient wishes to have it removed, how is it to be done? You cannot take hold of it with the forceps in common use; it will constantly escape; and yet you cannot attempt to cut it off with a chance of success, unless you can seize and hold it fast. Scissors have been contrived for this purpose, and are referred to and delineated by Mr. Cooper, in his "*First Lines of Surgery*." There is a sort of bend upon the blade, and a blunt end coming across one of the blades. It is proposed to put this behind the uvula, and snip it. You may catch the uvula in that way, but you cannot be certain of it, nor of the size and length of the portion you remove; you may take away much too little to give relief, or you may snip away the greater part of the organ; this would not answer, as the articulation is sometimes rendered indistinct by the loss. In order to be sure that you take away just as much as you wish, you must lay hold of it with these long forceps with hooks at the point, something like the artery forceps. These are more suited for the object. You thus take hold of the uvula lying on the tongue or dangling about, and with a pair of long scissors carried back in the throat, cut it away. It relieves the patient of all the symptoms, and after a very short time the wound heals. Adventitious growths are now and then seen in this situation, betwixt the layers of the velum, and then they are not always to be got away easily. I have removed some loosely connected, by merely laying them bare and detaching

their cellular connections. A tumor deeply and firmly attached, of course cannot be meddled with. Occasionally pendulous tumors are found here, and may be removed by the same means as the enlarged uvula is.

The tonsils and the uvula are the seat of ulceration; but this subject was, no doubt, partly treated of by my worthy and excellent colleague, when he spoke of syphilis and the effects of mercury on the constitution. All ulcers that occur in this situation are generally attributable either to the one cause or the other. Syphilitic ulcers are to be treated by general measures, such as affect the constitution and remove the poison from the system. But many of the small ulcers which are seen in patients who have suffered from syphilis or taken mercury, do not require any general management; they heal up very rapidly, by local applications. You touch them with some substance that will destroy the surface, and put them in a more healthy condition. Phagedænic ulcers are often stopped by touching them with a solution of mercury and nitric acid. You may pencil them over very lightly once or twice, at a considerable interval, with the nitrate of silver in substance or solution. I do not mean to say that attempts should not be made to improve the patient's health, by the exhibition of preparations of sarsaparilla and iodine. The iodide of potassium is often very beneficial. It is very desirable to put a stop to these ulcers, but you will not succeed unless you employ active local measures. You must attack them vigorously, and make such an application of the remedy as will destroy the sloughing edge, or the edge where the ulcer is going on rapidly. You then find the same effects follow here as in other situations; the ulcer is checked, and the healing process commences. If this be not had recourse to, the velum becomes destroyed, the parts are deformed, and their functions seriously impeded. Deglutition is performed with great difficulty; unless the patient is careful in attempting to swallow liquids, a portion comes through his nose; his voice is considerably affected, and when the parts become stretched, it is so much altered that the patient snuffles, and in a very unpleasant fashion indeed. The voice of a friend of mine who has lost nothing but the uvula is so indistinct, that he never makes an observation but I am obliged to ask him to repeat it. To be obliged constantly to ask a man when he is talking to you, "Eh, eh; what did you say?" is very annoying both to the individual and to those who come in contact with him. You must be very careful to prevent the spread of these ulcers; sometimes they go on to a great extent without being detected, and unless a surgeon has his eyes about him and all his faculties, he will often be deceived. The patient complains of a slight sore throat, and the ulceration may not be noticed. I have seen ulcers, over and over again, occur on the posterior aspect of the velum; these have been neglected, and, at last, gradually, from the destruction of the parts, perforation has taken place through the velum; the anterior surface has first of all become discolored, it has then become whitish, and ulcerative absorption has gone on. This opening will not heal up again without the parts being inconveniently stretched; and even after it has healed, some inconvenience remains.

I have thus given you a slight sketch of the diseases of the soft parts, and I will now talk to you about some affections of the jaws.

I have already spoken of the bad effects of decayed teeth and stumps, and have told you that an abscess occasionally forms at the fangs of the teeth. You will find now and then, on taking out the stump of a tooth, that there is a swelling, and on examination you discover that it is a cyst, containing puriform matter. Sometimes these cysts are of very large size. I have seen a cyst—a complete abscess—as large as the tip of the finger, come away on removing a tooth. These abscesses even break externally, and if any of the cyst is left, matter will continue to be discharged for some time. These abscesses sometimes so increase in size as to lead to a swelling of the jaws. An abscess formed at the socket of a tooth, now and then makes its way along the tooth. If the sockets have been a great deal absorbed, the matter at last comes up and presents itself under the gum. It is described under the name *parulis*—gum-boil. There is a superficial swelling of the gum, followed by suppuration; but the troublesome cases are those in which abscesses form in the very sockets of the teeth; they are attended with great pain, swelling of the face, and so on. The abscess gradually advances, and may be discovered fluctuating very distinctly. You open the mouth, and see a large swelling on the upper or lower jaw, which you find to be elastic, and on putting a lancet into it, there is a great escape of putrid matter, which is attended with much relief to the patient. If a patient has suffered from this once, the cause ought to be explained, and means ought to be taken to prevent the recurrence of it. He is unwilling to have the teeth taken out when the parts are quiet and going on well, but some of these collections form deep in the jaws; they go on increasing, the parietes of the abscess expand, and cavities in the bone are at last formed of considerable size. When formed in the upper jaw, the abscess may burst into the antrum, and sometimes there is a cavity, independently of that in the upper jaw, a large chronic abscess. The same thing occurs in the lower jaws. Sometimes the plates of the bone separate to a great extent, and if neglected for some time, you find tumors formed, of very large size, which are gradual and slow in their progress. These cases are known under the name of *spina ventosa*. It is only in patients who have been neglected, and in whom the disease has been allowed to increase from month to month, that anything of this kind is observed.

Then, again, in removing decayed teeth, or portions of them, which have been allowed to remain long, you will now and then perceive a fungous growth on the extremity—a soft, pulpy swelling, adherent to the apex of the fang. Again: if you notice a carious tooth when extracted, you will sometimes find a soft fungus in the hollow of it, and if you take the trouble of splitting it up with a pair of cutting pliers, you will find that the whole canal is filled up by a swelling, which expands like a mushroom. These swellings often increase in size; they fill up the remainder of the crown of the tooth, and sometimes form a connection with the spongy gums. In other cases the swelling commences at the gum, by the side of the decayed tooth, it gradually increases in size, and perhaps

involves the gums of the adjoining teeth. Some of these swellings are as hard as the gum ; some are soft and pulpy, and bleed on a slight touch ; and some again, though very seldom, assume a malignant character. These tumors are generally of a benign nature, they are firm in their consistence, and, if thoroughly extirpated, are not reproduced, but if any portion is left, they return. If the socket of the tooth, in which the disease commenced, is not taken away, and indeed the whole gum, the disease is sure to come back in a few months, following the analogy of tumors in other parts. I have told you that, however benign in its nature a fibrous or fatty tumor may be, if any portion of it be left, it will be reproduced ; but take away the whole, and there is little chance of the patient being again troubled with it.

These tumors sometimes are of a bad character ; but even in those of a contrary nature, where the operation is imperfectly performed, there is a return of the disease. The patient, much annoyed of course, again recurs to his surgeon ; caustic is perhaps applied from day to day ; becoming alarmed, he at last places himself under a person of more experience ; the whole is then taken away, and there is no further trouble. Here are some drawings from preparations belonging to Mr. Nasmyth, of Edinburgh, showing tumors of the gums. One represents a tumor occupying the posterior part of the upper jaw, with all the stumps stuck in the middle of it. The teeth are all in a bad state. Those persons who are foolish enough to allow useless portions of the teeth to remain, may lay their account to suffer from this disease. The pain has gone off, the nerve is destroyed, and they think there is no occasion for interfering with the teeth or having them taken out. They do not care about the fœtor of their breath ; they have perhaps arrived at a time of life when they think nothing of it ; but there is always a deal of mischief if these stumps in the jaws or gums are not taken out. They keep up the swelling and the tumors in the gums. Here is another drawing, showing a tumor of the gum, where the swelling has gone up from the interior of the tooth, and has spread over in a mushroom-like form, and becoming adherent to the spongy gums, has formed a large swelling.

In order to get rid of these tumors effectually, you must take away the whole of the growth. Most frequently you find them connected with the decayed fangs of the small grinders upon one side or other of the jaw, and most frequently the lower jaw. Sometimes you find them far back in the lower jaw, growing from the decayed roots of the last large grinder, and spreading their influence to the gums of the wisdom tooth and the grinder anterior to it. It is then a difficult matter to get quit of the swelling. If it be of large size, the patient can only open his mouth with difficulty, and you get but an imperfect view of it. In the fore part of the mouth there is no difficulty at all. All you have to do, then, is to extract a tooth, sound or unsound, on each side of the tumor ; the gums are more or less involved in the disease, and you can take them out with the forceps. If the disease were connected with a canine tooth, you would then take out the first small molar tooth, and the lateral incisor ; or suppose it were confined to the gums of the canine and first

molar, then you would take away the lateral incisor of that side, and the second small molar. You then apply a small saw (such as this) to the socket, and cut down the jaw, with a view of getting rid of the parts from which the disease has commenced, of removing the alveoli and the diseased sockets of the teeth. Before you apply the saw you carry your knife round the base of the tumor, and having applied it, and cut down the bone on each side, then, by the means of cross-cutting pliers, you remove the teeth and the sockets, together with the tumor. When the gums of several teeth are affected, you must take away a tooth on each side, and cut away the sockets of all the teeth. If you do this, there is no necessity for any further proceeding. Some surgeons recommend that you should employ an escharotic, as the potassa fusa, to remove the disease more effectually, but this is unnecessary. It is better to go far enough with the saw and the forceps. In order to get rid of tumors far back, and to avoid the necessity of cutting open the cheek, it is necessary to have forceps of various sizes and forms. Although these instruments look very large and coarse, and such as one might say farriers would employ, yet they enable you to remove the affection with less trouble and pain to the patient than if you use small and inefficient forceps. If you were to apply forceps half the size, you would find that you could not cut the sockets through cleverly; that they would bend, and you would have to repeat the operation; whereas, if you go properly to work, you will have no difficulty in accomplishing your object.—*London Lancet.*

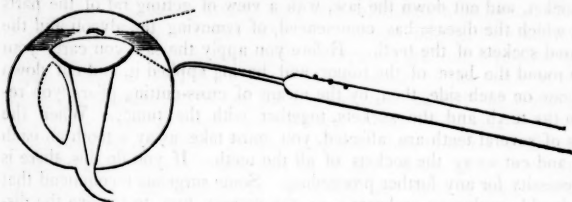
THE OPERATION FOR CATARACT.

By E. H. Dixon, M.D., New York.

[Communicated for the Boston Medical and Surgical Journal.—Continued from page 298.]

SINCE my last communication on this subject, I have been gratified with the complete removal, by absorption, of a caseous cataract, and that in the short space of two months, from the eye of a patient 68 years of age. Such a result, as every experienced surgeon well knows, is not to be expected as a general one. Yet where the patient is in high health, and of an even temperament, I should be much inclined to advise the operation for absorption in preference to depression, even at 50 years of age. A young surgeon is often tempted to depress a cataract by the eclat attending the immediate restoration of vision; yet he cannot learn too soon that the probability of permanent benefit to his patient and his own reputation, is infinitely less by so doing. Up to the period of 50 years, then, when the health is decidedly good, and the temperament active, I advise the local operation, or that for absorption—*anterior* if soft, and *posterior* if caseous. If hard, which can only be determined by its dark color, and extraction (which may sometimes be the preferable operation), depression, downwards and *backwards*. As the position of the needle and lens can only be shown in a plate, by a vertical section, the reader must transfer the needle mentally to his hand, and then holding the diagram

with the cornea facing him, he will understand the proper movement in depression, viz., *the third of a circle of eleven lines diameter.*



This diagram illustrates sufficiently the points I have endeavored to impress. It will be seen that when the lens assumes its proper position in depression, the most extreme caution must be used to prevent its tearing the retina which lines the entire globe, and is immediately contiguous to it. The angular lines proceeding from the posterior surface of the lens show the points beyond which it must pass, when depressed, to admit, without interruption, the light. Should it be depressed further than its position shown by the dotted line, it must injure the retina. The needle (Scarpa's) should pierce the sclerotic coat as far at least from the ciliary processes as shown, and immediately after piercing, the handle should be sufficiently depressed to permit its point to pass in front of the lens; it may be impossible to effect this without a little effort and a few seconds' delay. This part of the operation is by far the most essential to success, and it is only by perfect self-control that it can be properly done. The convexity of Scarpa's needle ensures the safety of the iris, and renders it possible to destroy effectually the anterior capsule. How this can be properly done with a straight or Hay's needle, in the posterior operation, I am at a loss to determine. With Scarpa's a half turn between the fingers must produce an effective effort upon the capsule. This movement cannot avail with Hay's—it being indispensable to elevate the handle; and this ensures laceration of the vitreous humor by partial depression, which is not the object of the operator in this, *the operation for absorption*. He may indeed, and doubtless must, slightly injure the vitreous humor in passing his needle effectually through a semi-fluid or soft lens, so as to destroy its posterior capsule; but he should endeavor to inflict as little injury as possible, and Scarpa's is undoubtedly the safest instrument. If, as in infants he should always do, he practise Saunderson's, or the anterior operation, he will of course find the curved needle the most effective, as this movement (the half turn) is much the most easy, will permit the wrist to be perfectly immovable, and the small and ring fingers to form a rest on the temple, the whole being effected by rolling the needle between the thumb and two fingers. This, moreover, is one of the movements in which the consentaneous action of the muscles is so happily developed, whilst learning to write, that it is done almost unconsciously, and, as a consequence, with more steadiness and precision than any other.

The anterior operation should be done with a puncture about a line from the union of the cornea with the sclerotic, as indicated by the dots. The point of the needle visible in the diagram in the centre of the pupil, and the dotted line from the point of puncturation in the posterior operation, is intended to show the line traversed till it appears in the pupil—the convex part, to be known by the dots on the handle, always being held towards the face of the operator. The dotted lines, showing the position of the lens in depression, prove that instead of depressing directly downwards, which has, and I fear will continue to effect the destruction of thousands of eyes, a movement equal fully to one third of a circle eleven lines in diameter, must be made with the point of the needle a little below the centre of the pupil; and that the operator has but a line to spare before the posterior edge of the cataract will injure the retina in that situation also.

New York, Dec. 1844.

THE USE OF CHARCOAL IN CONSUMPTION.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—Within the last two years, the writer has prescribed charcoal as a tonic, and with such well-marked good results, especially in cases of consumption, that he is induced to invite medical practitioners, through the medium of your Journal, to test its powers, and report their experience of its remedial effects; even, should they not find it so well deserving of attention, as he has been forced, from a close observation of its effects, to consider it.

In six cases of tubercular consumption, in which it has been used, and in which the writer had frequent opportunities of witnessing the results that followed its administration, he is satisfied that it possesses the power to lessen profuse sweats, and to resist emaciation. He will not claim for it the virtue of entirely arresting the former, or completely preventing the latter symptom of phthisis; although, in one of the cases in which it was given, the symptoms alluded to were arrested from the commencement of its exhibition; and increase of flesh was plainly manifest, after a few weeks of its continuance.

In two of the cases, the tubercular irritation is *suspended*. The patients believe themselves to be entirely free from disease, after having been so much reduced as to be obliged to confine themselves, almost constantly for a number of weeks, to their beds, and having suffered for months from all the characteristic symptoms of tubercular phthisis—a disease which had proved peculiarly fatal in each of the families of which the individuals, referred to, were members.

The charcoal has usually been directed to be taken finely powdered, in drachm doses, three times a day; and whenever it appeared to occasion the least irritation to the bowels, a few drops of paregoric have been administered with each dose. On the other hand, costiveness has been obviated, by combining with it, occasionally, a few grains of rhubarb.

The reflections of the writer on the observed results of carbon in cases of consumption, have led to the following theory ; which he submits to the consideration of the readers of your Journal.

1st. Natural respiration admits into the circulation a standard volume of oxygen at each inspiration (the standard having only a relation to each individual). Diseased respiration consists of a deviation from the natural standard ; and may be attended by an increase or a decrease of the normal quantity.

2d. During health, the vital powers resist the introduction of an increased quantity of oxygen ; while the chemical affinities secure the system from the evils which might arise from an imperfect oxygenation of blood. Thus, healthy respiration always maintains a medium relation to these two important *properties*.

3d. In tubercular disease of the lungs, the tonicity of the absorbing surface of the air-cells is impaired ; yielding to the chemical affinities, and permitting them to combine oxygen with the blood in greater quantities than when in health ; until disorganization occasions a physical barrier to its admission.

4th. Not only is the weakened tonicity of the parietes of the air-cells, a cause of the introduction of an increased quantity of oxygen into the system, in cases of consumption ; but as tubercles are the product of a general disease, a similar condition of the vital property which binds the ultimate atoms of organization together, permits the *organic affinities* to yield readily to the decomposing influence of oxygen.

5th. Water and carbonic acid gas are the principal products of a union of oxygen with the elements of organization ; and are always proportionate to the amount of oxygen introduced into the system. Hence arise the profuse sweats, the diuresis and the emaciation of consumption.

6th. The introduction of carbon into the system, by the *prima viæ* in the form of charcoal, or combined with hydrogen, in the forms of *naphtha* or the animal oils, affords elements with which oxygen may combine ; and thus save the organization from its destructive influence. But as the product of a union of oxygen with carbon alone, escapes, principally, by the lungs, the patient is not subjected to the uneasiness of night sweats, or the trouble of diuresis, which are generally produced when the hydro-carbonaceous compounds are used.

Several objections to the above theory might be advanced ; such, for instance, as imputing the healthy absorption of oxygen into the circulation to an active vital function, rather than yielding it entirely to a mere physical property ; the *endosmose* of Dutrochet, or the introduction of carbon, uncombined with an equivalent of oxygen, into the circulation, by the lacteals. The writer, however, will defer offering any arguments in defence of his propositions, to another opportunity. When the facts, upon which the theory is based, are tested by the experience of others, a different result may be found, or a further explanation be given.

Bangor, Me., Dec. 16, 1844.

NEW BOOKS NOT ALWAYS USEFUL.

[Communicated for the Boston Medical and Surgical Journal.]

"A List of the most important articles in the *Materia Medica*, with their doses in substance, infusion, tincture, together with tables of weights and measures, observations on the art of prescription, &c."

It would be difficult to assign a reason for the publication of the above pompously announced pamphlet, either for anything new in the information it conveys, or on account of any deficiency which it supplies. Letting alone the puerile pedantry of the short preface, which would characterize a school-boy under the ferrule, let us turn to the contents, meagre and unsatisfactory as they are. The directions given under the head of "Art of Prescribing, &c.," are rather remarkable for their vagueness, than for any valuable information they convey. We are told that "medicines act differently on the same individual in summer and in winter, and in different climates." Now, what the nature of this difference is, we are left to guess, and unless the reader knows more than the author seems to do, of the effect of climate in modifying the action of medicines, he will be left rather in the dark. He might suppose, for all that is here conveyed, that calomel acted better in the temperate than the torrid zone, and that Epsom salts was a capital medicine in the West Indies!

We have seen that the little that is original, is profitless enough; let us turn to the compilation. In a work professing to give an account of the most important medicines, we perceive, at a glance, some serious omissions. Let us suppose that one of the graduating class, to whom the pamphlet is dedicated, should depend on it solely for a work of reference. Perhaps he wishes to administer iodine to a scrofulous patient. The tincture will probably disagree with the stomach, indeed it is now scarcely used except for cheapness, and if he wished to use the simple solution there is no hydriodate of potass to facilitate the process, without which it would be rather difficult to dissolve the iodine. Of the syrup of the iodide of iron, which has superseded every other preparation, which has the merit of agreeing with the stomach and preserving the virtues of the iodine, and which is exclusively used in Boston, the author seems never to have heard. The graduate will be confined to rather a narrow range in his treatment of *secondary syphilis*, for he will find no mention made of hydriodate of potass, of the proto-iodide or bin-iodide of mercury. He sees nothing of tannin, of savin. In his treatment of diseases of the bladder, he will be somewhat troubled by the want of buchu (*diosma crenata*), and pareira brava, the favorite remedy of Sir B. Brodie in those complaints. He is allowed to give a grain of strychnine at a dose! Let him try this heroic practice, and he will probably set his patient's muscles into a series of spasmodic contractions, like those of a frog under a galvanic battery. Is the author aware that a grain and a half has proved fatal? The dose named by Dr. Pereira is one twentieth to one sixteenth of a grain. The graduate is rather limited in his preparations of iron. He sees no mention of the citrate, ammonio-tartrate or ferrocyanate of iron, and in case his patients' stomachs do not relish any of the few pre-

parations given here, he must abandon the iron treatment. Let us suppose one of his patients has taken a poisonous dose of arsenic ; he can do nothing for the unfortunate, for the hydrated sesquioxide of iron, the only and sure antidote to the effects of the poison, has no place in his reference book, i. e., "The List," &c. The suicide must therefore die unaided. He had better trust to an intelligent apothecary than to the work in question. He will find no mention of sanguinaria, or of Indian hemp (*Cannabis sativa*). Of the former, Dr. Joseph Carson, the American editor of Pereira, says, "It is one of the most valuable of our native productions," and we can tell the author that it has saved the life of many a child dying with croup ; and the latter, Dr. O'Shaughnessy, of Calcutta, has made so famous, that we thought there was no one who had not heard of it, in the profession. It is observable that the author shows an entire ignorance of American drugs, and never makes any mention whatever of the American Pharmacopœia. Is this decent or proper ? And, on the whole, what shall we say of a publication which has the omissions mentioned and many more, prescribes a dose of a grain of strychnine (!), and has no single merit of form, arrangement, novelty or convenience. Were the practitioner ill-advised enough to appeal to it, its pamphlet form would preclude it from use as a pocket book, and its price as a table book. It sells for 37½ cents, while the Prescriber's Pharmacopœia, which, by the way, we can recommend, as supplying the deficiencies of the "List," &c., can be had for 50 cents, and is in a neat form for the pocket.

After all that we have said, it is hard to tell why this publication was given to the world, except for the pleasure of seeing oneself in print.

December, 1844.

A CONSTANT READER.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, DECEMBER 25, 1844.

Study of Ancient Crania.—From year to year this Journal has endeavored to keep its scientific readers apprised of the profound researches of Dr. Morton, of Philadelphia, into the primeval physical conformation of man. In his deductions, he has been exclusively influenced by what he saw, and in no instance has he presumed to establish a theory, not based upon conclusive inductive evidence. Egypt, the sepulchre of untold millions of the human race, in hundreds of ingeniously devised tombs, and in the very centre of those colossal monuments which have been the astonishment of successive generations, from a remote epoch, contains the identical bodies of the people who erected the pyramids, whose masonry seems destined to endure to the consummation of all material things. The skulls of these long-buried men are placed on a table—removed from the quiet resting places they erected for themselves, to wait the call of Horus, the deity of their adoration—and a philosopher of 1844 deduces from their esteological and phrenological developments, their true character while they were living, conscious beings. Such is

the marvel of modern science—it decyphers the mystic history of humanity, by tracing its phases on the bony box that ages ago protected a brain.

In the comparative anatomy of the human races, in its widest sense, elucidated by history, craniology and monumental hieroglyphical inscriptions, Dr. Morton is the undisputed founder of a *new science*, which was first suggested by Blumenbach. Unaided by government, and exclusively at his own individual expense, his cabinet has not only become the largest but the most truly valuable collection of crania in the world. It abounds in rare specimens, in exact series. There are skulls of American aborigines from the Arctic Ocean to Cape Horn, ancient and modern, embracing a field so extensive, that in his *Crania Americana* we are gratified with a glimpse of a remote civilization, in an undefined antiquity, on this continent.

In Egyptian crania, there is not a museum, either governmental or private, that will begin to compare with that in Philadelphia. Cuvier thought that to have fifty skulls of mummies was sufficient to enable him, says Mr. Gliddon, to determine that the ancient Egyptians were Caucasians—but Dr. Morton ranges over one hundred and seventeen skulls, of every age, from all parts of Egypt. Mr. Geo. R. Gliddon, the learned hierologist, collected in Egypt a unique cabinet, which he generously presented to Dr. Morton, the present proprietor.

After reading Dr. Morton's works on the builders of the Nilotic Monuments, older by many centuries than the Pentateuch, in which are proofs that the ancient Egyptians were Caucasians, we turn with distaste from the writings of Pritchard. He dodged, Mr. Gliddon declares, hierological evidences, and all the discoveries of the modern school of ethnographers, and scarcely deigns to allude even to monumental or sepulchral truths, which cannot be objected to or passed over. All Dr. Pritchard's classical fictions are completely annihilated by Dr. Morton's facts; and the theory of physical alterations of man within the last 4000 years, save by direct amalgamation, is made out to be a complete absurdity by the *Crania Egyptiaca*.

None but a hierologist can question the monumental data; no one but an anatomist can attack the osteological deductions—and this, we believe, is the reason why our cotemporaries, both in Europe and in this country, say so little about either, in philosophizing upon civilization. A new era commences with the exclusive study of man, and we are now freed, at last, says Mr. Gliddon, from the silly speculations, as to whether the ancient Misraimites were negroes—in regard to which, thousands of needless pages have been written. One American savan, singlehanded, in respect to establishing the Caucasian race of the Hæmetic family, has achieved more than all the ethnographical societies in existence. Scholars may now look for a forthcoming *Crania Africana*; and in the humble capacity of an editorial laborer in the field of science, we shall gladly chronicle all that is discovered in this interesting and instructive department of knowledge. Those who would understand the natural history of man, should begin at the right place. With these considerations, we would urge upon our professional brethren a minute acquaintance with the anthropological researches of Dr. Morton, which are honorable to the age and to the scientific fame of our common country.

Relations of the Atmosphere to Plants and Animals.—Some lecturers are always successful in impressing their auditors favorably. Such is the fact, if we may judge from his writings, in regard to Prof. Draper, of the chemical chair in the University of New York. He appears destined to give peculiar character to that institution. His acknowledged intellectual power, tact, perseverance and unflinching industry, are the true elements of renown.

We can now but briefly allude to an introductory discourse recently delivered by this gentleman, at the opening of the present lecture term, on the relations of the atmospheric air to plants and animals, to say that it is an able and interesting production. Dr. Draper began at the onset, two or three years ago, in creating a favorable impression—and he has since, in his writings, gradually ascended higher and higher in public estimation. Dr. Draper's prelections on light and its influences, the universal tendency to decay, death, and the value of chemical pursuits, embodied in this unpretending little pamphlet, contain the germs of the grandest conceptions of the human intellect. Of all the introductory of the season, good and deserving as they are, in point of philosophical dignity and splendor no one excels Dr. Draper's.

Monument to the Memory of Dr. Forry.—A subscription has been opened in New York for a monument to the memory of the late lamented editor of the Medical Journal of that city. It is proposed to erect it in Greenwood Cemetery. The expense of marble, iron railing, and the purchase of a lot, require a liberal demonstration of regard on the part of the profession, by whom the undertaking is conducted, and we sincerely hope nothing will be wanting to carry out the original design. Such an expression of respect for one who labored so devotedly for the extension and promotion of medical science, as Dr. Forry, would be honorable to the physicians of the commercial emporium.

A Universal Remedy.—A letter-circular heralds the gratifying intelligence, that a Mr. John B. Cross "has discovered a new remedial power of the electric current, which has been pronounced by one of the most eminent professors in the country (his address is at the service of inquirers) to be, in relation to electricity, one of the most interesting facts, if true, that he has ever heard of." Aye, that is the rub—if true! Who is the eminent individual who is willing to play thorough bass to another genuine quack enterprise? The city of Boston, it seems, is still considered profitable ground for empiricism, notwithstanding the prodigious tax its inhabitants have already paid into the coffers of designing knaves. Mr. John B. Cross, who appends to his name *neurologist and electrician*, has electrical warm baths, too! This quite out-generals, in point of yankee ingenuity, all predecessors in his line.

The discoverer of this new remedial power "does not presume to intimate the abandonment of the family physician—but would have those afflicted with tic douloureux, nervous and sick headaches, earache, dyspepsia, gout, rheumatism; soreness, pains or inflammation of the stomach, breast, bowels, side, back, lungs, liver, kidneys, groin, &c.; epileptic, cataleptic and paralytic affections, withering of the limbs, muscles, or nerves,"

and an almost endless list of other aches, pains and diseases, whose names we have no room to quote, and "which appear to baffle the ordinary medical practice, present the subject for the decision of his judgment." How modest!—and Mr. John B. Cross, neurologist and electrician, actually abominates humbug as much as any gentleman in the community! Verily, the world is full of abominations, and Boston is still the paradise of quacks.

Strabismus Knife and Probang.—Dr. Smilie, of Derry, N. H., whose ingenuity in the contrivance and construction of surgical instruments we have often had occasion to refer to, writes as follows respecting two new ingenious and useful contrivances.

"Dear Sir,—I send you an instrument designed for the purpose of rendering the operation for strabismus more simple and less painful. The blade is composed of a single piece of steel, out of which is formed at the point a curved hook for raising the tendon, and a curved knife at its base to divide it. After having raised the muscle upon the curved probe, above the conjunctiva, according to the usual custom, the extremity of the probe, with the tendon depending, is carried above the opening, and is then carefully pushed forward and the muscle is exposed to the edge of the scalpel. By the above process there is less danger of inflicting injury on other parts of the eye, as every portion of the muscle raised upon the probe will be divided without the irritation of a second trial, which frequently follows the old method of operating.

Also an instrument for extracting foreign substances from the œsophagus. It has few peculiarities to recommend it, save utility, cheapness of material, and construction. And a knowledge of its form and material would enable every physician, with moderate constructiveness, to command one from his own mechanical resources. It is formed from whalebone. The shaft is to be made sufficiently long to reach the cardiac orifice of the stomach. One extremity of it is to be armed with four barbs, which are to be formed from whalebone, and the heads of each are to be wrought in a circular form, to enable them to be withdrawn without lacerating the œsophagus. These are to be confined to the end by thread, and in the process a proper angle can be given to the heads of the barbs to correspond with the calibre of the œsophagus. After they have been confined with thread it should be waxed over. The opposite extremity of the flexible shaft should be covered with sponge to suit the calibre of the œsophagus.

Extraordinary Births.—A late Liverpool paper announces the fact, that Mrs. Wm. Faulkner, of Moville, county of Derry, was delivered of a daughter, the 1st ult., and *thirty-three days after*, of a son. Between the first and latter births, the mother enjoyed excellent health and attended to her domestic affairs. If there is a parallel case on medical record, it does not occur to us where or when it happened. The children were called twins.

Treatment of Plethora by Saline Medicines.—"The treatment of plethora is often not nearly so easy as that of anæmia. In many cases it will

not suffice merely to abstain from animal food, and to drink large quantities of simple cooling beverages, in the hope of attenuating and impoverishing the condition of the blood. Then, again, the effects of bloodletting are generally only transitory; and, moreover, the very loss of blood seems not unfrequently to induce a more active proportionate formation of it. On the whole, the use of saline laxatives, and of the hydrochlorate of ammonia (sal ammoniac), seem to be the most useful means that can be employed for the relief of plethora, when it gives rise to inconvenient symptoms.

"Dr. Lheritier, in his recent treatise on pathological chemistry, informs us that he has found that the proportion of the red globules in the blood of rabbits was decidedly modified by the internal use of this salt, in the course of two or three weeks.

"The nitrate of potash has similar effects; so also have the alkaline subcarbonates, and the liquor potassæ itself. Perhaps the latter is, on the whole, the most efficient impoverisher of the blood, provided, also, the diet is spare, and not too nutritious, and all malt liquors are avoided."—*Medico-Chirurgical Review*.

On a New Mode of Dressing Wounds and Ulcers. By DR. LANGIER, M.A.M., Surgeon to Beaujon Hospital.—This method consists in applying, on the surface of the wound or ulcer, a solution of gum arabic, and on it a bit of goldbeater's skin; thus dressed, a wound, an inch in diameter, was reduced in the space of eight days to one-third or one sixth of an inch in extent. Cicatrization took place so rapidly, that the granulations, covered with a thin epidermis, were as numerous and visible as before, but could be touched without causing pain. A wound, produced by amputation of the breast, highly inflamed, about four and a half inches in breadth, under this treatment, healed rapidly, and purulent secretion did not take place. The author proposes applying this method to a wound left by amputation of the thigh.—*London Medical Times*.

Camphor a Preservative of Ergot of Rye. By JOHN N. SIMPSON, M.R.C.S., &c.—I was not a little surprised to read some remarks by Mr. Rawle, stating camphor to be a preservative of ergot of rye. I can only say that I have been in the habit of using it for the last nine or ten years, but not exactly in the manner described by him. I order the camphor to be *mixed* with the powdered ergot, in the proportion of a grain in every scruple. By this means I think the camphor is more intimately diffused throughout the whole than can possibly take place by the plan proposed by Mr. Rawle. I do not give this either as a new, or, indeed, my own discovery; for I adopted the method by having seen it in the practice of Mr. Spurgin, an old practitioner also at Saffron Walden, and from whom I have every reason to believe that your correspondent also obtained the same information, he having been engaged in the same gentleman's practice.—*London Lancet*.

Medical Practice in Illinois.—By the way, the *country* seems to me, in this State, to be the best locality for a physician. Illinois has no circulating, but a lively *locomotive* medium, which a physician might accu-

mulate around him in abundance. As I was lately riding out with one of the oldest physicians in the State, he met a patient, who insisted on paying his bill in horses or fat cattle, and another took me to his farm, to show me, among other objects, the colts and calves which he had derived from the same source. In this way a physician might soon overspread a grazing farm with stock, and by its means replenish his stock of quinine when exhausted, which cannot always be done with the whole amount of money received from those who consume it.—*Dr. Drake's Travelling Letters in Western Journal.*

Medical Miscellany.—John Hightower recently died in Alabama, at the great age of 126 years. He received a wound at Braddock's defeat.—Mesmerism is raging most famously at Painsville, O. under the manipulating fantasies of Mr. Spence, in regard to whose skill in making moonshine tangible, three ladies and a huge committee of other people bear ample testimony.—Dr. Childs, of Massachusetts, gave his introductory before the medical class of Willoughby University week before last, which is reported to have been a happy effort, and will speedily be published. The class is twice as large, it is said, as it ever was before.—Dr. Middleton Goldsmith, of New York, has been appointed professor of surgery in the Castleton Medical College, Vermont.—Smallpox has appeared at Southport, and Caledonia, near Racine, Wisconsin.—Dr. Clarke, the owner of Congress Spring, Saratoga, is said to have an annual income of \$20,000 from that property.—Dr. Adams, in Missouri, is accused of murdering a negress, by beating her to death, in a fit of passion.—Yellow fever and typhus were prevailing dreadfully at the last dates, at Tampico, Metamoras and other places on the Gulf of Mexico.—The Vermont Watchman and Journal speaks of Prof. C. S. Chase—a dealer in pathetism—“*who has secured an enviable reputation in New York and New England, as an operator and lecturer.*” Who is he? We never heard of him before in any shape.

MARRIED.—In Chelsea, Mass., Francke Williams, M.D., to Miss Caroline Bartlett.—Dr. Henry Church, of Granby, Ct., to Miss H. P. Griswold.—At Haddam, Ct. Dr. Rufus Baker, of Deep River, to Miss S. Shaler.—At Prairie Spring, Wisconsin, Dr. L. Nash, of Rochester, Racine Co., to Miss S. M. Berry.

DIED.—In Illinois, Dr. Nelson, founder of the Mission Institute, formerly a medical practitioner.—At New York, Dr. Wm. McCoppin, 74.—At Goshen, N. Y., Dr. Horton.—At Beverly, Mass., Edward Bradstreet, M.D., 31.

In Puerto Cabello, Venezuela, Oct. 28, Dr. Franklin Litchfield, aged 59. Dr. L. was a citizen of this State, and a graduate of Harvard, but had resided for the greater part of his life in the West Indies, New Grenada, and Venezuela. He was U. S. Consul at Puerto Cabello for nearly twenty-one years, and well known not only here, but in all places where Venezuela was known. Dr. Litchfield was distinguished not only as a physician, but as a civilian and a merchant. He was the intimate friend of Bolivar, Pena, Santander, Paez, Flores, Salom, and in fact all the distinguished patriots of Colombia, many of whom are yet living to revere his worth and do homage to his memory. M.

Number of deaths in Boston, for the week ending Dec. 21, 34—Males, 16; Females, 18.

Of consumption, 5—poison, 1—hooping cough, 3—dropay on the brain, 1—dropay, 1—slow fever, 1—inflammation of the lungs, 1—typhus fever, 2—scarlet fever, 3—accidental, 1—lumbago, 1—paralysis, 2—disease of the heart, 1—croup, 2—infantile, 3—marasmus, 2—canker, 1—cholera infantum, 1—unknown, 2.

Under 5 years, 18—between 5 and 20 years, 5—between 20 and 60 years, 9—over 60 years, 2.

Vicarious Menstruation.—Dr. A. Forget communicated to the *Société Médicale d'Emulation*, the following curious fact:—Miss —, ætat 16, dark hair and eyes, general health good, menstruated for the first time at 15, since which period, the catamenia came on regularly every month, without pain, and lasted four days. On the 27th of March, 1844, two hours after their apparition, a fright caused them to cease suddenly. The next day, intense cephalalgia declared itself; face red and heated; continual drowsiness; throbbing of the heart to an unwonted degree; anorexia, &c. 1st April: Miss — experienced considerable difficulty in opening the right eye, accompanied with the sensation of a foreign body under the lids, and spots of blood were soon after observed on the corresponding cheek. During the day, at different times, hæmorrhage took place from the inner canthus, the blood being of a bright red, flowing, tear-like, drop by drop. On the succeeding days, it transuded, not only from the conjunctiva, but likewise from the skin covering the right cheek, the nose, chin, and back of the hand; once only from the meatus auditorius externus, the scalp, and the tongue. No precursory symptoms were manifested, except those already mentioned. The parts from which the blood escaped, may be classed as follows:—chin and nose; inner canthus; back of the hand; meatus auditorius; scalp, and tongue. The hæmorrhage ceased as soon as the patient went out, and the whole time it lasted, its consistence, color and temperature of the skin, were in their normal condition. On the 15th April, violent colics declared themselves, which ceased as soon as the patient had evacuated a tumblerful of liquid, florid blood. Finally, in the beginning of May, the catamenia appeared as usual. The treatment employed consisted in mustard-foot baths, fumigations of an infusion of *artemisia vulgaris*; fourteen enemas of warm water, and, internally, an infusion of *artemisia vulgaris*.—*London Medical Times*.

Astringent Remedies.—The following are the results of Dr. Gottschalk's experiments, as regards the astringent power of the sulphates of copper, zinc, and iron; acetate of lead; alum; sulphuric, muriatic, and nitric acids; creosote, &c. 1. The strongest astringents, as alum, acetate of lead, sulphate of iron, lose much of their constrictive powers, if employed in a liquid form. 2. The liquid form, counteracting astringency on the one hand, causes, on the other, a relaxation of the animal tissues, and thus affords an easier ingress to foreign matters. 3. The acids (muriatic and sulphuric) possess no constrictive power, beyond making the tissues a little denser. The vegetable astringents, according to the author's experiments, do not merit this designation. His experiments, performed with decoct. querc., ratanh., tormentill., gall. turc., &c., prove: 1. That the above remedies display no constrictive effects, if used in a form, in which they are prevented withdrawing the water from the tissues with which they come in contact. 2. They are the less constrictive, as they are received with greater facility into the organs (as in a liquid form), thereby increasing the density and bulk, but without constricting the parts. 3. If we except substances, which cause contraction by their action on the nervous system (as strychnine), we possess no vegetable constrictive agents, but merely exsiccatives and refrigerants.—*Dr. Gottschalk in Schmidt's Jahrbucher*.